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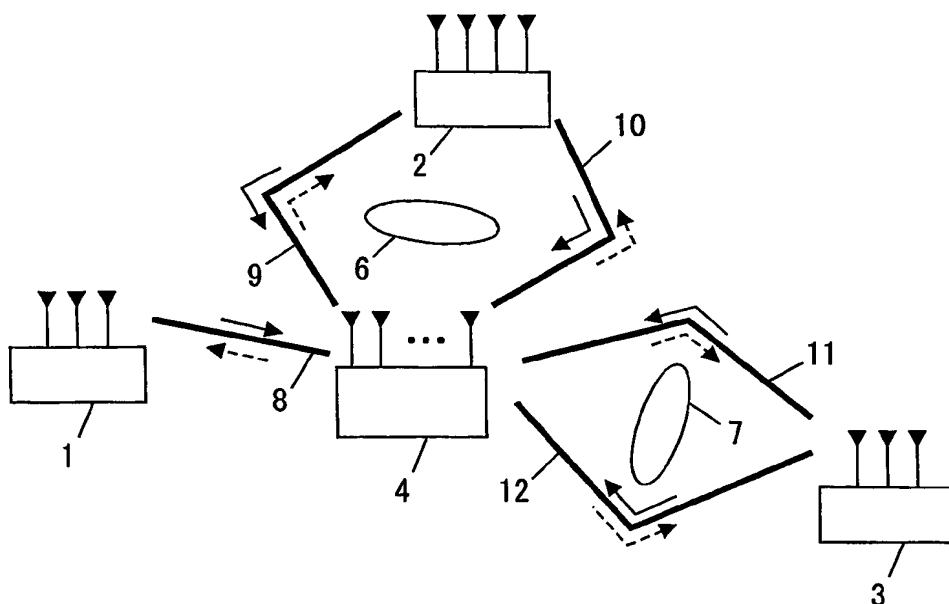
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(54) Title: SPACE DIVISION MULTIPLEX WIRELESS COMMUNICATION SYSTEM, DEVICE AND METHOD FOR THE SAME



(57) Abstract: A wireless communication system comprises a base station (4) and terminals (1) - (3). The base station (4) and the terminals (1) - (3) perform a space division multiplex wireless transmission. Each of the base station (4) and the terminals (1) - (3) comprises a multi-beam antenna for a space division multiplex. A beam pattern formed by the multi-beam antenna of the base station (4) is orthogonalized based on transfer function values of a radio-wave-propagation characteristic formed between antenna elements of the multi-beam antenna of the base station (4) and antenna elements of multi-beam antenna of the terminals (1) - (3).

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